



DYNAMIC SYSTEMS AND CONTROL DIVISION (DSCD)

AMERICAN SOCIETY OF MECHANICAL ENGINEERS
Established in 1943

Background

The Dynamic Systems and Control Division (DSCD) is one of 33 technical divisions in the American Society of Mechanical Engineers (ASME). The division has actively developed and broadened its scope from instruments, regulators, and automatic control, since its establishment in 1943.

The division encompasses all aspects of the modeling, analysis, design, instrumentation, and control of physical dynamic systems that involve forces, motions, and/or the flow of energy or material.

Mechanical, chemical, biological, and human-related systems, and other multi-domain systems such as electromechanical and mechatronic systems; particularly automotive and transportation, energy, robotics, manufacturing, processing, environmental, computational, and man-machine systems are covered by our division.



DSCD Objectives

1. To constitute a professional division of ASME in accordance with the constitution, bylaws, and policies of the Society in the field of Dynamic Systems and Control.
2. To facilitate the development, advancement, practice, and promotion of the art, science, and engineering of Dynamic Systems and Control in accordance with the mission statement contained in Article III of the bylaws.

DSCD Mission Statement

1. Highlight and promote technical innovations in the field of Dynamic Systems and Control, particularly those with direct positive impact to society.
2. Promote multidisciplinary and industrial collaborations.
3. Provide effective, high quality forums for communicating and archiving technical advances, and assessment of societal needs in Dynamic Systems and Control.
4. Promote the development of professionals in Dynamic Systems and Control.
5. Develop and sustain an active, diverse and global membership.
6. Foster the development and promotion of leadership in industry, academia, and government with dynamic systems and control expertise.
7. Enhance public and governmental awareness of the societal relevance of the division's activities.

DSCD Technical Committees

Dynamic Systems and Control is a fast growing and pervasive engineering field. There is rarely an engineering endeavor that does not involve the careful control, analysis, and/or synthesis of physical, dynamic systems. Be it fluids, thermodynamics, heat transfer, machine design, or materials engineering, systems and control contributions are essential. The division has the following technical committees:

- Automotive and Transportation Systems
- Robotics
- Mechatronics
- Vibration and Control of Smart Structures
- Modeling, Identification and Intelligent Systems

Division Membership

Approximately 8,000.

Conferences and Technical Meetings

ASME Dynamic Systems and Control Conference (DSCC)
American Control Conference (ACC)

The DSCD holds business meetings of its executive committee each year at DSCC and ACC

Other conferences co-sponsored by DSCD include:

Advanced Vehicle Control (AVEC) International Symposium
IEEE/ASME Advanced Intelligent Mechatronics (AIM)
International Symposium on Flexible Automation

Publications

ASME Journal of Dynamic Systems, Measurement, and Control
The IEEE/ASME Transactions on Mechatronics

Strengths of the Division

- Long history of interaction with professional societies in other disciplines through joint conferences and publications
- Strong volunteer participation
- Sound financial basis
- Recognition of outstanding engineering achievement through award programs, including the Oldenburger Medal, the premier ASME Award in Dynamic Systems and Control
- Effective outreach programs including a biannual newsletter
- Multidisciplinary character
- Support and encouragement of new and student members

Planned New Activities

- Collaboration with other societies with similar interests
- Encouragement of industry participation through relevant activities
- Distinguished Lecture Program e.g., 2010 DSCC Nyquist Lecture
- The 2010 Rufus T. Oldenburger Medal recipient
- Continue to promote division conference - DSCC
- Execute division strategic plan

Personnel

Details are found at: <http://www.asme.org/divisions/dscd/>

At the top of the organizational chart is the Executive Committee, whose membership is given below.

Committees

